

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0331; Directorate Identifier 2016-NM-213-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes. This proposed AD was prompted by reports of undamped main landing gear (MLG) extension in-service. This proposed AD would require replacement of the MLG retraction actuator rod-ends on both MLG assemblies. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
 - Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
 Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC
 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0331; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Fabio Buttitta, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft

Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7303; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section.

Include "Docket No. FAA-2017-0331; Directorate Identifier 2016-NM-213-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2016-36, dated December 6, 2016, (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Bombardier, Inc. Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes. The MCAI states:

Two cases of undamped main landing gear (MLG) extension were reported in-service. Investigation

determined that the MLG retraction actuator rod-ends failed as a result of non-conforming threads. This condition, if not corrected, could lead to additional MLG undamped extensions, which may result in MLG structural failure, resulting in an unsafe asymmetric landing gear configuration.

This [Canadian] AD mandates the replacement of the MLG retraction actuator rod-end subassemblies manufactured with non-conforming threads with units that fully conform to the design requirements.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0331.

Related Service Information under 1 CFR part 51

Bombardier, Inc. issued Service Bulletin 8-32-179, Revision A, dated March 9, 2017. This service information describes procedures for replacing the MLG retraction actuator rod-ends on both MLG assemblies with units that fully conform to the design requirements. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD affects 91 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement	3 work-hours X \$85 per hour = \$255	\$2,078	\$2,333	\$212,303

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Bombardier, Inc.: Docket No. FAA-2017-0331; Directorate Identifier 2016-NM-213-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes, certificated in any category, serial numbers 003 through 672 inclusive, equipped with main landing gear (MLG) retraction actuator assembly part number 10500-101, -103, -501, -551, or -553.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Reason

This AD was prompted by reports of an undamped MLG extension in-service. We are issuing this AD to prevent MLG undamped extensions, which could result in MLG structural failure, resulting in an unsafe asymmetric landing gear configuration.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Replacement of MLG Retraction Actuator Rod-ends

At the applicable time specified in paragraph (g)(1) or (g)(2) of this AD: Replace the MLG retraction actuator rod-ends on both MLG assemblies, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-32-179, Revision A, dated March 9, 2017.

- (1) For MLG retraction actuator assemblies with 37,000 total flight cycles or more as of the effective date of this AD: Within 18 months or 2,700 flight cycles, whichever occurs first after the effective date of this AD.
- (2) For MLG retraction actuator assemblies with fewer than 37,000 total flight cycles as of the effective date of this AD: Within 24 months or 3,600 flight cycles, whichever occurs first after the effective date of this AD.

(h) Alternative Installation of Part Number (P/N) 10500-105, -503, or -555

Installation of MLG retraction actuator assembly P/N 10500-105, -503, or -555 on both MLGs is acceptable for compliance with the replacement required by paragraph (g) of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 8-32-179, dated July 10, 2015.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k)(2) of this AD. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2016-36, dated December 6, 2016, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0331.

(2) For more information about this AD, contact the Program Manager,

Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410,

Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531.

(3) For service information identified in this AD, contact Bombardier, Inc.,

Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5,

Canada; telephone 416-375-4000; fax 416-375-4539; email

thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com. You may view

this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue

SW., Renton, WA. For information on the availability of this material at the FAA, call

425-227-1221.

Issued in Renton, Washington, on April 24, 2017.

Paul Bernado,

Acting Manager,

Transport Airplane Directorate,

Aircraft Certification Service.

[FR Doc. 2017-08830 Filed: 5/1/2017 8:45 am; Publication Date: 5/2/2017]

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